Claims

1. A manually deformable input device responsive to manually applied pressure, comprising

a deformable resilient element configured to deform in response to said manually applied pressure, operatively coupled with

an electroconductive material applied configured to exhibit changes in conductance (resistance) in response to being stretched; and

an electrical interface device configured to supply electrical current through said electroconductive material via a first terminal and a second terminal, wherein:

a third terminal is connected at an intermediate position; and

said interface device is configured to receive a voltage from said third terminal.

2. An input device according to claim **1**, wherein said electroconductive material is applied over said deformable resilient element.

3. An input device according to claim **1**, wherein said electroconductive material is embedded within said deformable resilient element.

4. An input device according to claim **1**, wherein said deformable resilient element is constructed from a foam or foam-like material, rubber or silicone rubber.

5. An input device according to claim **1**, wherein said

electroconductive material is a textile fabric.

6. An input device according to claim 5, wherein said textile fabric is a warp knit, a weft knit or a weave that includes conductive fibres.

7. An input device according to claim 1, wherein said electroconductive material is an elastomeric material having electroconductive components therein.

8. An input device according to claim 1, wherein said deformable resilient element and said electroconductive material are provided by an elastomeric electroconductive textile.

9. An input device according to claim 1, wherein the conductance of said electroconductive material increases when said material is stretched.

10. An input device according to claim 1, wherein said interface device is configured to measure a divided voltage between said first terminal and said second terminal.

11. An input device according to claim 1, wherein said interface device is configured to produce an output signal.

12. An input device according to claim 11, wherein said output signal is used to:

control a motor;

provide an input command to a game;

raise an alarm condition;

raise a visual, aural or tactual effect response;

control a cursor;

navigate a menu.

13. An input device according to claim **1**, configured to be responsive to translation, rotation, compression or indentation of said deformable resilient element.

14. An input device according to claim **1**, comprising a frame.

15. An input device according to claim **1**, comprising a gripping member.

16. An input device according to claim **1**, further comprising a fourth terminal.

17. A method of detecting deformation of a deformable input device, said input device comprising

a deformable resilient element configured to deform in response to applied pressure, operatively coupled with

an electroconductive material configured to exhibit changes in conductance (resistance) in response to being stretched, and

a first electrical terminal, a second electrical terminal and a third electrical terminal, said third terminal at a position intermediate said first terminal and said second terminal; said method comprising the steps of:

establishing a voltage gradient across said electroconductive

material via said first terminal and said second terminal, and

measuring a voltage appearing at said third terminal.

18. A deformable input device substantially as herein described with reference to and as shown in *Figures 1* to *26* of the accompanying drawings.

19. A method of detecting deformation of a deformable input device substantially as herein described with reference to and as shown in *Figures 1* to *26* of the accompanying drawings.